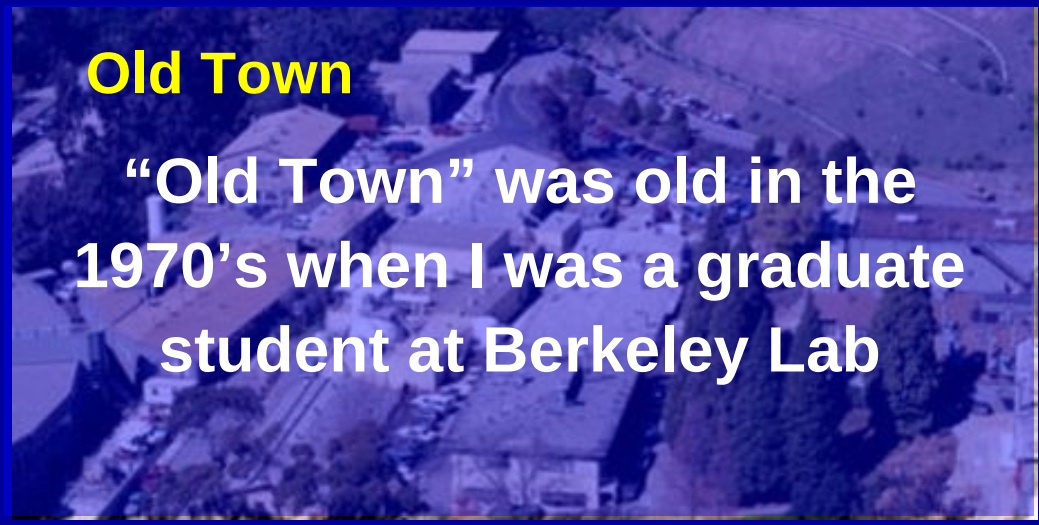
Berkeley Lab Business Planning Meeting

Office of Science, U.S. Department of Energy

May 3, 2005

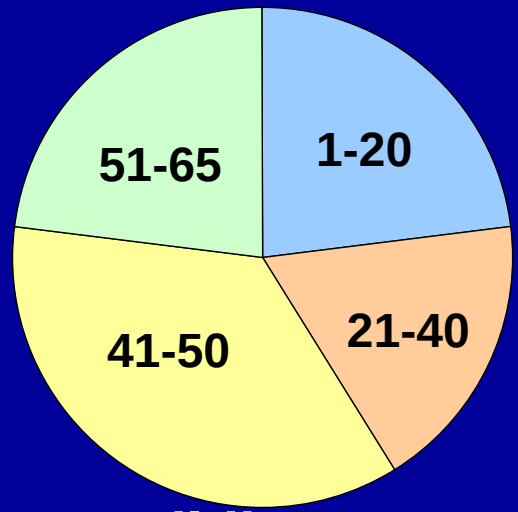
Office and Laboratory Space Are Limited and Replacement Is Required

- Insufficient space
- Seismic safety needs
- User support needs
- Obsolete buildings
- Growing inventory of condemned buildings



Bevatron deconstruction

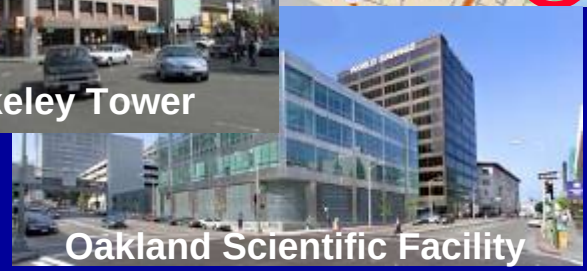
Building 74: seismic safety and functionality



Building age (years)

Leases are the Near-Term Step for Addressing Space Needs

- New space for integrated biology at Potter Street
  - Genomics:GTL; synthetic biology; computational biology; low-dose radiation biology; integrative cancer biology
  - Joint lease with UC Berkeley (72,000 gross square feet)
- Total lab and office leases in Berkeley and Oakland: 189,000 gross square feet; cost $4.9M per year
- June 2005: 15% of Laboratory staff will be in leased space



Partner with UC to Create Dual-Use Buildings and a Berkeley Lab Guest House

- UC borrowing capacity for low-cost financing of UC constructed buildings
  - DOE will allow UC to use 501.3(c) financing
  - UC Berkeley is proposing to apply $40M to partially finance two dual-use buildings
- Berkeley Lab will service the debt primarily by finding efficiencies, reduced lease costs and increases in overall Laboratory budget

Computational Research and Theory Building ($90M)

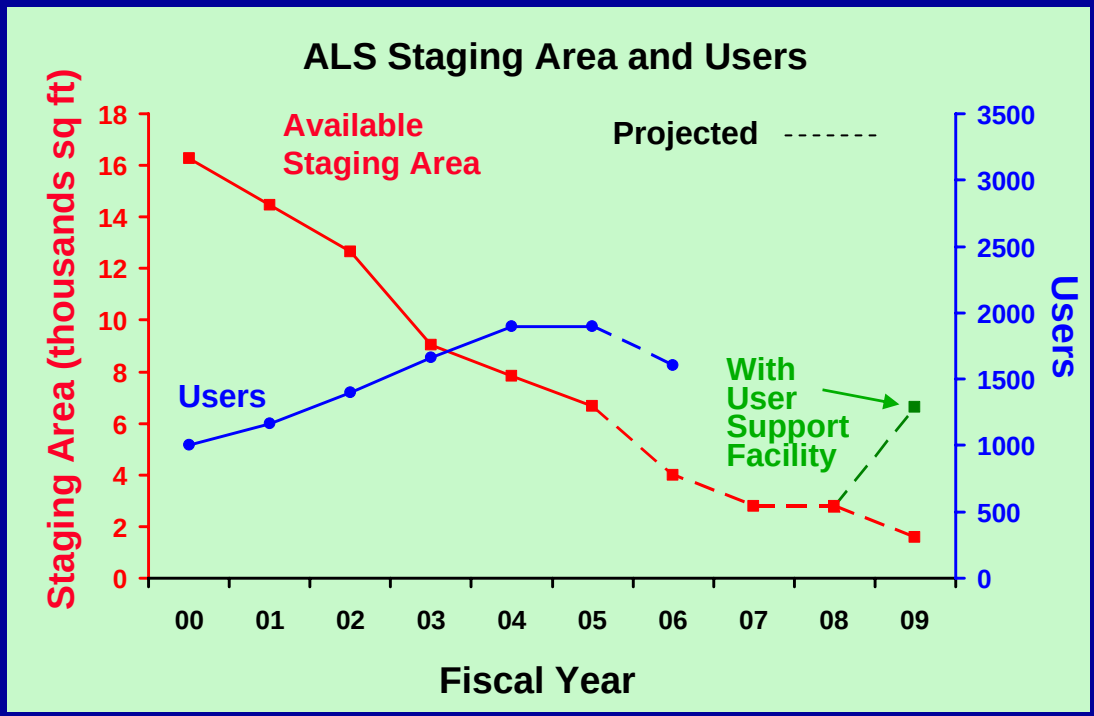
Nano Physics Research Laboratory ($91M)

Berkeley Lab Guest House ($7.5M)

Office of Science
U.S. DEPARTMENT OF ENERGY

BERKELEY LAB

Major Risk: Inadequate User Support and Staging Area



- Meet the needs of a growing user community and alleviate beamline growth into current staging areas

Priority Need: User Support Building

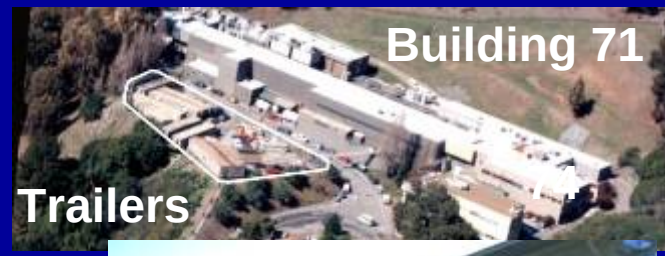
Cost: $22M

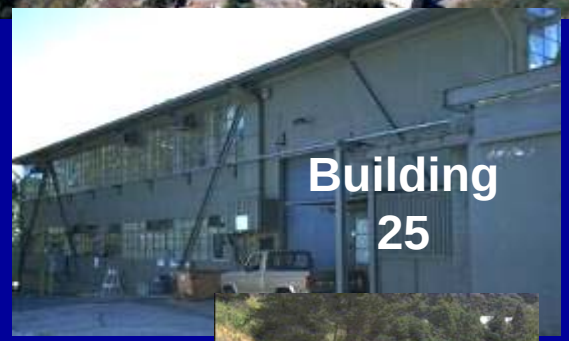
- Current ALS staging area: 140 square feet per beamline
- 2009 ALS staging area will be 30 square feet per beamline
- Advanced Photon Source has 340 square feet per beamline

Replaces a seismically "very poor" Building 10

Major Risk: Seismic Event Threatens Research in 14 Buildings Constructed 1944 to 1964

- New seismic safety analysis indicates structural problems with older buildings
- Approximately 50% of buildings fully characterized; 16 problem buildings
  - Demolition required for two buildings (25, 50D) Cost: ~$2.3M
  - Possible demolition for six buildings (10, 17, 25A, 44, 50C, 71A) Cost: ~$3.2M
  - Rehabilitation needed for eight buildings (50, 71, 72, 74, 76, 6, 54, 64) Cost: ~$34.5M
- Characterization of all buildings to be completed in FY 2007





Scientific and Operational Talent

UC joint appointments;
Control G&A costs

Tools to Serve the Science Community

User support; ALS;
NERSC; JGI; TEAM;
ATLAS; SNAP/JDEM

Scientific and Support Facilities

DOE investments
User Support Building;
Building 51 & Bevatron

Critical Factors for Berkeley Lab Mission Success

Open Research Environment

Site access;
Information Technology

Safety Culture

Structurally safe buildings;
Integrated Safety Management